

DEPARTMENT of ENVIRONMENTAL SERVICES
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: SAWYER POND, LITTLE	Lake Area (ha): 4.45
Town: LIVERMORE	Maximum depth (m): 8.8
County: Grafton	Mean depth (m): 3.1
River Basin: Saco	Volume (m ³): 138000
Latitude: 44°03'07" N	Relative depth: 3.7
Longitude: 71°22'51" W	Shore configuration: 1.07
Elevation (ft): 2070	Areal water load (m/yr): 5.59
Shore length (m): 800	Flushing rate (yr ⁻¹): 1.80
Watershed area (ha): 32.8	P retention coeff.: 0.64
% watershed ponded: 0.0	Lake type: natural

BIOLOGICAL:

12 January 1994

16 August 1993

DOM. PHYTOPLANKTON (% TOTAL)	#1	SPARSE - NO DOMINANT	MERISMOPEDIA 45%
	#2		DINOBRYON 30%
	#3		
PHYTOPLANKTON ABUNDANCE (cells/mL)			685
CHLOROPHYLL-A (µg/L)			1.61
DOM. ZOOPLANKTON (% TOTAL)	#1	KERATELLA 71%	KERATELLA 44%
	#2	CALANOID COPEPOD 19%	CALANOID COPEPOD 33%
	#3		
ROTIFERS/LITER		23	17
MICROCRUSTACEA/LITER		6	22
ZOOPLANKTON ABUNDANCE (#/L)		31	39
VASCULAR PLANT ABUNDANCE			Scat/Common
SECCHI DISK TRANSPARENCY (m)			8.1 Visible on bottom
BOTTOM DISSOLVED OXYGEN (mg/L)		13.1	9.3
BACTERIA (E. coli, #/100 ml)	#1		
	#2		
	#3		

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None
Hypolimnion volume (m³) : None
Anoxic volume (m³) : None

CHEMICAL:

Lake: SAWYER POND, LITTLE
Town: LIVERMORE

	12 January 1994		16 August 1993		
DEPTH (m)	2.0	5.0	2.0		6.0
pH (units)	6.1	5.6	6.5		6.4
A.N.C. (Alkalinity)	2.3	2.5	1.4		1.7
NITRATE NITROGEN	0.17	0.19	< 0.02		< 0.02
TOTAL KJELDAHL NITROGEN	0.20	0.20	0.21		0.12
TOTAL PHOSPHORUS	<0.001	<0.001	0.004		0.003
CONDUCTIVITY (μ mhos/cm)	21.7	22.3	19.4		19.7
APPARENT COLOR (cpu)			< 5		6
MAGNESIUM			0.13		
CALCIUM			1.6		
SODIUM			1.0		
POTASSIUM			0.65		
CHLORIDE	< 3	< 3	< 3		< 3
SULFATE	4	4	3		3
TN : TP			53		40
CALCITE SATURATION INDEX			4.5		

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1993

D.O. S.D. PLANT CHL TOTAL CLASS

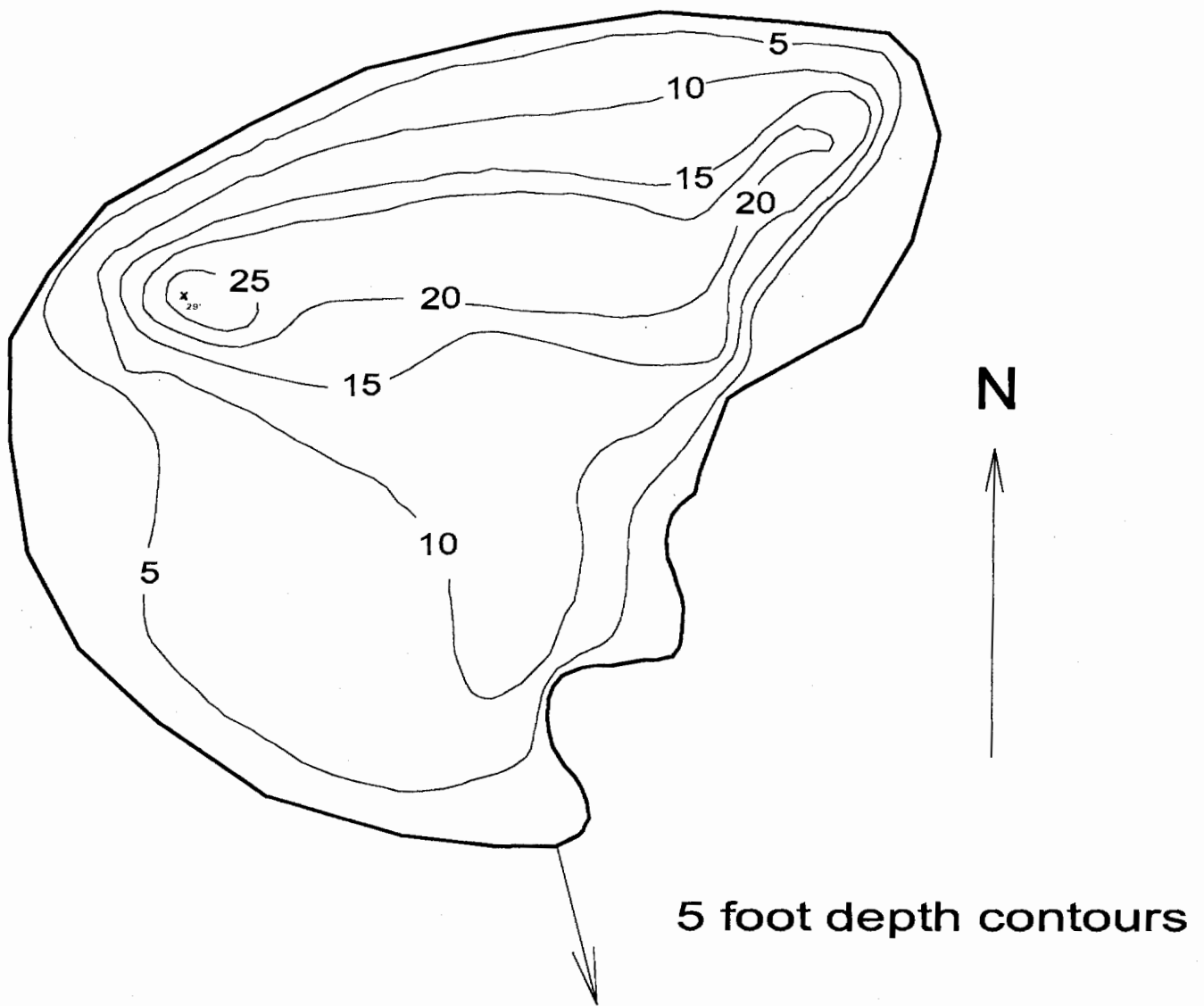
**	0	2	0	2	Oligo.
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COMMENTS:

1. This is a remote pond, located in the White Mountain National Forest, that was surveyed jointly with the N.H. Fish & Game Department. It has been sampled annually by helicopter for acid rain parameters since 1983 in the Department's "Acid Rain-Remote Ponds" program.
2. This is a crystal clear oligotrophic pond with very low phosphorus levels and visibility to the bottom (26 1/2 feet).
3. Numerous submerged logs were present around the pond.
4. Merismopedia (85%) was a strongly dominant wholewater phytoplankton genus.

Little Sawyer Pond

Livermore



0 0.1

Km

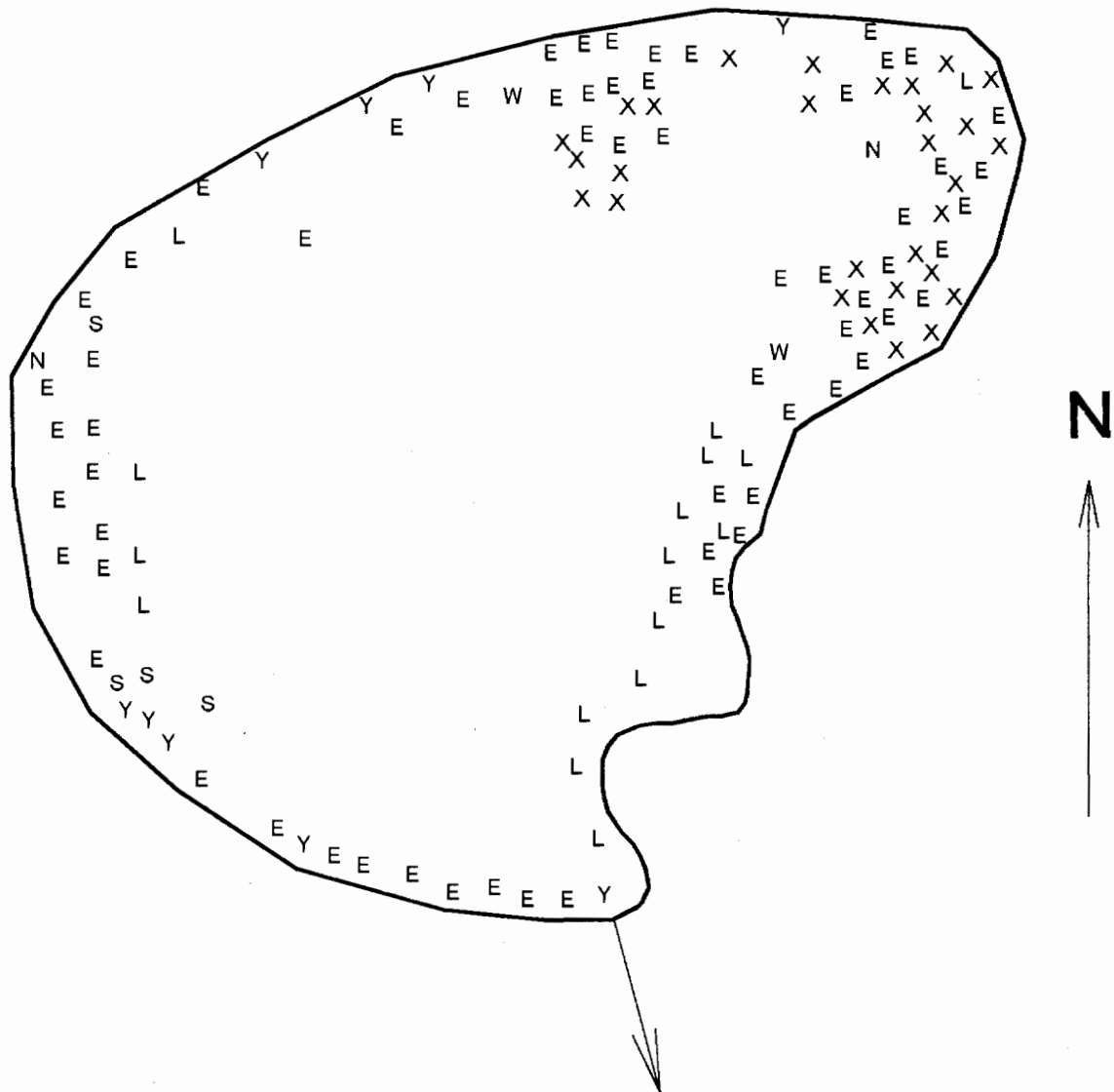
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Little Sawyer Pond

Livermore



0 0.1

Km

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